

Remarks

The Office Action mailed April 18, 2007, has been carefully reviewed and the foregoing amendment and following remarks have been made in consequence thereof.

Claims 11-20 are now pending in this application. Claims 1-10 have been canceled. Claims 11-20 stand rejected.

The rejection of Claims 11-20 under 35 U.S.C. § 102(b) as being anticipated by Umemura et al. (U.S. Pat. No. 5,871,234) ("Umemura") is respectfully traversed.

Umemura describes a steering wheel (1) that absorbs the energy of a forward force (F) applied against the steering wheel (1). The steering wheel (1) includes a core bar (2) having a ring core bar (3), a boss core bar (4), front spoke core bars (5), and rear spoke core bars (8). Each front spoke bar (5) includes a torsional portion (7). Each rear spoke core bar (8) includes a first bent portion (11) and a second bent portion (12). When the forward force (F) is applied to the steering wheel (1), the torsional portion (7) twists and the first and second bent portions (11 and 12) deform such that the forward force (F) is absorbed. Notably, Umemura does not describe nor suggest a rotor blade installation tool that includes at least one handle coupled to at least one brace at a predetermined angle.

Applicants respectfully traverse the Examiner's assertion on page 4 of the Office Action that "Umemura et al. is capable of performing the intended use and therefore meet the claimed invention." The intended use of the claimed invention is as a tool to couple a plurality of rotor blades to a rotor disc. To couple the rotor blades to the rotor disc, at least one handle is coupled to at least one brace at a predetermined angle to facilitate inducing an axial force to a plurality of rotor blades. The steering wheel in Umemura absorbs a forward force by deforming at a plurality of portions. As such, if the steering wheel of Umemura were used to couple rotor blades to a rotor disc, the steering wheel would deform to absorb the applied axial force required to couple the blades to the disc, rather than facilitate inducing an axial force to a plurality of rotor blades, as required by the claimed invention.

Claim 11 recites a rotor blade installation tool for coupling a plurality of rotor blades to a rotor disc wherein each rotor blade extends from the rotor disc to a radially outer blade tip, the tool comprising “a blade engagement end configured to engage the plurality of rotor blades between the rotor disc and the radially outer blade tip, said blade engagement end comprising an engagement top surface . . . at least one brace coupled to said blade engagement end at a first end of said at least one brace . . . at least one handle coupled to said at least one brace at a predetermined angle to facilitate inducing an axial force to the plurality of rotor blades . . . and a guide end coupled to a second end of said at least one brace, said guide end comprising a body including a guide end top surface positioned above said engagement top surface.”

Umemura does not describe nor suggest a rotor blade installation tool for coupling a plurality of rotor blades to a rotor disc as is recited in Claim 11. Specifically, Umemura does not describe nor suggest a rotor blade installation tool that includes at least one handle coupled to at least one brace at a predetermined angle to facilitate inducing an axial force to a plurality of rotor blades. Rather, Umemura describes a steering wheel that includes a core bar having a ring core bar, a boss core bar, front spoke core bars, and rear spoke core bars wherein the spoke core bars are coupled between the ring core bar and the boss core bar. Accordingly, for at least the reasons set forth above, Claim 11 is submitted to be patentable over Umemura.

Claims 12-20 depend, directly or indirectly, from independent Claim 11. When the recitations of Claims 12-20 are considered in combination with the recitations of Claim 11, Applicants submit that dependent Claims 12-20 likewise are patentable over Umemura.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 11-20 be withdrawn.

The rejection of Claims 11-13 and 16-20 under 35 U.S.C. § 102(b) as being anticipated by Thro et al. (U.S. Pat. No. 4,650,436) (“Thro”) is respectfully traversed.

Thro describes a yoke centering apparatus (10) for a cathode ray tube. The apparatus (10) includes a spider (14) coupled to a spindle (11). The spider (14) includes arms (16, 17, 18, and 19) extending radially from the spindle (11). Each arm

(16, 17, 18, and 19) includes a flat surface (21, 22, 23, and 24), wherein two flat surfaces (21 and 23) include a locating member, or locating pin (26 or 27) extending axially therefrom. A planar positioning member (29) is coupled to the spider (14) using the locating pins (26 and 27). The planar positioning member (29) is aligned parallel with the arms (16, 17, 18, and 19). The planar positioning member (29) includes an annular inset (31) that is offset from a surface of the member (29) such that a test set support ring (32) is supported within the inset (31). Notably, Thro does not describe nor suggest a rotor blade installation tool that includes at least one handle coupled to at least one brace at a predetermined angle.

Applicants respectfully traverse the Examiner's assertion on page 6 of the Office Action that "Thro et al. is capable of performing the intended use and therefore meet the claimed invention." The intended use of the claimed invention is as a tool to couple a plurality of rotor blades to a rotor disc by engaging the tool with the rotor blades. More specifically, the claimed invention includes a blade engagement end configured to engage a plurality of rotor blades between a rotor disc and a radially outer blade tip.

The Examiner at page 5 of the Office Action cites the annular inset (31) of Thro as teaching the blade engagement end recited in the claimed invention. However, the annular inset of Thro could not perform the intended use of the blade engagement end of the claimed invention because the annular inset of Thro could not contact a rotor blade if the yoke centering apparatus were to contact a rotor blade. More specifically, the annular inset is offset from a surface of a planar ring positioning member (29), as clearly shown, for example, in Figure 2 of Thro. Because the annular inset is offset from the surface of the planar ring positioning member, the planar ring positioning member or test set support ring would come into contact with a blade, rather than the annular inset coming into contact with the blade.

Further, the planar positioning member would not perform the intended use of the claimed invention. The intended use of the claimed invention is as a tool to couple a plurality of rotor blades to a rotor disc. To couple the rotor blades to the rotor disc, at least one handle is coupled to at least one brace at a predetermined angle to facilitate inducing an axial force to a plurality of rotor blades. The planar

positioning member of Thro is shown as having pins extending therethrough. As such, if the planar positioning member were to contact a rotor blade and an axial force were induced to a plurality of rotor blades, the rotor blades may be damaged by a pin extending through the planar positioning member, by an edge of an aperture into which the pin is inserted, and/or by a groove formed between the pin and the aperture. As such, if the planar positioning member of Thro were used to couple rotor blades to a rotor disc, the planar positioning member would damage the rotor blades when the axial force required to couple the blades to the disc was inducing to the plurality of rotor blades, as required by the claimed invention

Claim 11 recites a rotor blade installation tool for coupling a plurality of rotor blades to a rotor disc wherein each rotor blade extends from the rotor disc to a radially outer blade tip, the tool comprising “a blade engagement end configured to engage the plurality of rotor blades between the rotor disc and the radially outer blade tip, said blade engagement end comprising an engagement top surface . . . at least one brace coupled to said blade engagement end at a first end of said at least one brace . . . at least one handle coupled to said at least one brace at a predetermined angle to facilitate inducing an axial force to the plurality of rotor blades . . . and a guide end coupled to a second end of said at least one brace, said guide end comprising a body including a guide end top surface positioned above said engagement top surface.”

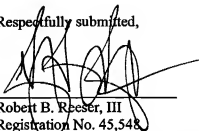
Thro does not describe nor suggest a rotor blade installation tool for coupling a plurality of rotor blades to a rotor disc as is recited in Claim 11. Specifically, Thro does not describe nor suggest a rotor blade installation tool that includes at least one handle coupled to at least one brace at a predetermined angle to facilitate inducing an axial force to a plurality of rotor blades. Rather, Thro describes a yoke centering apparatus that includes a spider having arms extending radially from a spindle, wherein the arms are coupled to a planar positioning member. Accordingly, for at least the reasons set forth above, Claim 11 is submitted to be patentable over Thro.

Claims 12, 13, and 16-20 depend, directly or indirectly, from independent Claim 11. When the recitations of Claims 12, 13, and 16-20 are considered in combination with the recitations of Claim 11, Applicants submit that dependent Claims 12, 13, and 16-20 likewise are patentable over Thro.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 11-13 and 16-20 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. B. Reiser, III', is written over a horizontal line.

Robert B. Reiser, III
Registration No. 45,548
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070